

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* SHOJI IWAMOTO and KAZUO ITAKURA

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Appeal No. 97-1626  
Application 08/299,123<sup>1</sup>

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ON BRIEF

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Before CALVERT, *Administrative Patent Judge*, McCANDLISH, *Senior Administrative Patent Judge* and STAAB, *Administrative Patent Judge*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 and 3-10. Subsequent to the final rejection,

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<sup>1</sup> Application for patent filed September 2, 1994.

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appellants

amended claims 1, 3 and 5, and canceled claim 8.<sup>2</sup> Thus, claims 1, 3-7, 9 and 10 remain before us for review.

Appellants' invention pertains to a pallet conveyor for use in a production line comprising a series of intermittent conveyors, and supplementary conveyors disposed between adjacent intermittent conveyors. As explained by appellants on page 3 of the specification, "the pallet conveyor of the present invention is easy [sic] adjustable to any production line by removing or adding appropriate number of intermittent conveyors and supplementary conveyors." Independent claim 1, a copy of which appears in the appendix to appellants' brief, is exemplary of the appealed subject matter.

In rejecting the claims under 35 U.S.C. § 102(b) and 35 U.S.C. § 103, the examiner relied upon the references listed

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<sup>2</sup> The amendments filed subsequent to the final rejection are amendment "B" (Paper No. 8, submitted May 6, 1996) and amendment "C" (Paper No. 12, submitted July 30, 1996). Although the examiner has indicated that each of these amendment have been entered (examiner answer, page 2), they have not as yet been physically entered. The examiner may wish to correct this oversight.

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below:

Schlegel	2,719,625	Oct. 4, 1955
Ota	3,253,692	May 31, 1966
Masino et al. (Masino)	3,858,519	Jan. 7, 1975

The appealed claims are rejected as follows:<sup>3</sup>

(a) claims 1, 3 and 4, under 35 U.S.C. § 102(b), as being anticipated by Masino;

(b) claims 5-7 and 9, under 35 U.S.C. § 103, as being unpatentable over Masino in view of Ota; and

(c) claim 10, under 35 U.S.C. § 103, as being unpatentable over Masino in view of Schlegel.

The rejections are explained in the examiner's answer (Paper No. 14, mailed August 27, 1996).

The opposing viewpoints of appellants are set forth in the brief (Paper No. 13, filed July 30, 1996) and the reply brief (Paper No. 15, filed October 28, 1996).

Masino pertains to a "transfer conveyor assembly comprising in essence a receiving part A, a transfer part B,

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<sup>3</sup> In the statement of the rejections on pages 3 and 4 of the answer, the examiner inadvertently included canceled claims 2 and 8.

and a discharge part C. The transport receptacles 1, 2, 3, 4 and 5, which serve for receiving [articles for transport,] . . . are guided in an endless T-rail 6" (column 2, lines 10-15). The carrier chain 7 is driven intermittently (column 2, lines 10-12) and includes members 7a for engaging the receptacles. Transfer part B comprises two horizontally spaced, parallel endless belts 8 and 9 continuously driven by motor 8a (column 2, lines 32-34). As seen in Figure 2 and described at column 2, lines 34-46, the upper reaches of belts 8, 9 frictionally engage the lower surfaces of receptacles coming off receiving part A for transferring the receptacles to discharge part C. Part C comprises a carrier chain 10 similar to carrier chain 7 of part A for receiving receptacles from part B and conveying them to a downstream work station. Ultimately, receptacles coming off discharge part C are recycled to receiving part A by means of endless band 11. In all instances, receptacles remain engaged with and are guided by endless T-rail 6.

Claim 1, the sole independent claim on appeal, calls for a plurality of intermittent conveyors being intermittently driven, and a supplemental conveyor being constantly driven and disposed between an adjacent two of said intermittent

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conveyors. In addition, the supplemental conveyor is required to be "removably attachable" to the adjacent intermittent conveyors.

In rejecting claim 1 as being anticipated by Masino, the examiner has found that members 7 and 10 of Masino constitute intermittently driven conveyors and that members 8, 9 constitute a continuously driven conveyor. As to the requirement that the supplemental conveyor is "removably attachable" to the intermittent conveyors, the examiner has taken the position that "conveyors 8, 9 [of Masino] are removable the same way they were mounted by screwdrivers, hammers, wrenches, etc. Note anything man made is removably detached by screwdrivers, hammers, wrenches, saws, torches or explosives" (answer, page 3).

While we appreciate the point the examiner is trying to make, the examiner's broad interpretation of "conveyor" and "removably attachable" is improper in this instance because it fails to take into account appellants' disclosure. When read in light of appellants' specification, the term "conveyor" in this instance constitutes not merely the belts 19 and 20 of the intermittent conveyors and/or the endless belt 33 of the

supplementary conveyor, but also the components (frame, guide rollers, pulleys, etc.) that support such endless belts and enable the belts to convey pallets. See appellants' specification, page 5, first paragraph ("the first intermittent conveyor 3 is constituted of . . .") and the paragraph spanning pages 6-7 of the specification ("The first supplemental conveyor 9 is constituted by . . ."). Therefore, Masino's carrier chain 7, endless belts 8 and 9, and carrier chain 10 cannot, by themselves, be properly regarded as corresponding to any of the claimed "conveyors," in our view. Rather, T-rail 6, common to each of the carrier chains 7 and 10, endless belts 8 and 9, and endless belt 11, must, at a minimum, also be regarded as part of any conveyor in Masino.

As to the claim 1 requirement that the supplementary conveyor is "removably attachable" to the intermittent conveyors, the examiner's position that this requirement includes components which are detachable by saws, torches or explosives is unreasonable. This is especially so in light of appellants' disclosure on page 6 of the specification that the supplementary conveyors are formed "as a unit," and the disclosure on page 7 of the specification that the

supplementary and intermittent conveyors are constructed such that the pallet conveyor as a whole may be "easy [sic, easily] adjustable" to any production line by removing and adding an appropriate number of supplementary or intermittent conveyors. Stated differently, one of ordinary skill in the art would not consider conveyors which require the use of saws, torches and/or explosives in order to separate them to be "removably attachable" in the sense intended here. The examiner's view to the contrary in essence reads the term "removably attachable" out of the claim.

The examiner also considers that "removably attachable" includes components which are detachable by screwdrivers, hammers or wrenches. However, Masino is silent as to whether or not the T-rail 6, which we regard as a necessary part of any conveyor in Masino, is made up of components which are connected such that they may be separated from each other in this manner, and it is speculative to presume that this is the case.

In light of the above, we cannot sustain the examiner's § 102 rejection of claim 1, or claims 3 and 4 which depend therefrom. We also cannot sustain the examiner's § 103

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rejection of dependent claims 5-7 and 9 since the additionally applied Ota reference does not make up for the deficiencies of Masino discussed above.

Turning to the § 103 rejection of claim 10 as being unpatentable over Masino in view of Schlegel, admittedly, Schlegel discloses as a general principle that it is known to secure together various components of a single conveyor by means of arms 16, 17 and removable fasteners 18, 25, etc. However, it is not clear why one of ordinary skill would consider this teaching to be relevant to Masino's T-rail, nor how this teaching is to be applied to Masino in a manner which would result in the claimed subject matter in the absence of appellants' own disclosure. Accordingly, we conclude that the proposed combination is based on the use of impermissible hindsight. The rejection of dependent claim 10 therefore also will not be sustained.

Under the provisions of 37 CFR § 1.196(b), we enter the following new rejections.

Claims 1, 3-7, 9 and 10 are rejected under 35 U.S.C. § 112, first paragraph, as being based on a disclosure that fails to provide descriptive support for the invention as now



claimed.

Subsequent to the final rejection, independent claim 1 was amended to include "first means for transferring said pallets from a most downstream one of said series of intermittent conveyors to said feed back conveyor after said work pieces are removed from said pallets" and "second means for transferring said pallets from said feed back conveyor to a most upstream one of said series of intermittent conveyors while putting a first one of said work pieces on each of said pallets."

Appellants' description of what occurs at the upstream end of the production line is found on page 9 of the specification and reads as follows:

When assembling the above described film unit 40 on the production line as shown in Fig. 2, first the basic body 53 is supplied from a parts supply section 69 onto the pallet 13. The basic body 53 is fixedly positioned on the pallet 13 by confining projections 13a and 13b formed on the top surface of the pallet 13. The pallet 13 is then put on the rails 25 of the first intermittent conveyor 3 of the pallet conveyor 1.

Appellants' description of what occurs at the downstream end of the production line is found on page 11 of the

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specification and reads:

The unit body 43 assembled in this way is removed from the pallet 13 by a sorting device 76, and is conveyed on a conveyor 77 toward the next working station wherein the unit body 43 is wrapped with the outer casing 44. The empty pallet 13 is fed back to the supply section 69 through the feed-back conveyor 78.

A careful reading of the above reveals that there is no mention whatsoever of any apparatus, and in particular the sorting device 76, for transferring pallets from the most downstream one of the intermittent conveyors to the feed back conveyor 78. Likewise, there is no mention whatsoever of any apparatus, and in particular the parts supply section 69, for transferring pallets from the feed back conveyor 78 to the most upstream one of the intermittent conveyors. In addition, there is no representation whatsoever in drawing Figure 2 or any other drawing figure of any cooperation or interconnection between the feed back conveyor 78 and either the sorting device 76 or the parts supply section 69 for carrying out the transferring functions recited in the means-plus-function limitations of claim 1.

Means-plus-function language in a claim must be construed

to cover the corresponding structure described in the specification and equivalents thereof. *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994). While the *step* of transferring pallets from a most downstream one of the intermittent conveyors to the feed back conveyor and the *step* of transferring pallets from the feed back conveyor to a most upstream one of the intermittent conveyors may perhaps be inferred from appellants' specification, there is no disclosure, inherent or otherwise, of any corresponding *structure or apparatus* for performing such steps, much less any equivalent structure that is also covered by the means-plus-function language of claim 1. Furthermore, the circumstance that the above noted steps of transferring pallets to and from the feed back conveyor may be performed by a human being does not provide descriptive support for the means-plus-function limitations added to claim 1. See *Fredkin v. Irasek*, 397 F.2d 342, 347-48, 158 USPQ 280, 285 (CCPA), *cert. denied*, 393 U.S. 980 (1968) and *Keeler v. Kistler*, 128 USPQ 442, 446 (Bd. Pat. Int. 1958), both citing with approval *Wilcox v. Danner*, 53 F.2d 711, 716, 12 USPQ 16,

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21 (CCPA 1931) ("We are clear that the manual drawing away of the glass from the device by Wilcox did not constitute a means for guiding away the glass called for in the counts in question and in the specifications of the parties.") *Compare In re Bernhart*, 417 F.2d 1395, 1399, 163 USPQ 611, 615 (CCPA 1969) (a human being is not the equivalent of a machine).

In light of the foregoing, appellants' disclosure fails to provide descriptive support as required by 35 U.S.C. § 112, first paragraph, for the "first means for transferring" and the "second means for transferring" limitations added to claim 1 during prosecution.

Claims 1, 3-7, 9 and 10 are further rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. *In re Johnson*, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). The purpose of the requirement found in the second paragraph

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of 35 U.S.C. § 112 is to provide those who would endeavor, in future enterprise, to approach the area circumscribed by the claims of a patent with the adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance. *In re Hammack*, 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970).

In the present case, the area set out and circumscribed by the "first means for transferring" and the "second means for transferring" limitations of claim 1 is obscured by failure of the specification to describe any corresponding structure for performing the functions specified in these limitations. As stated by the court in *In re Donaldson Co.*, 16 F.3d at 1195, 29 USPQ2d at 1850 (Fed. Cir. 1994):

. . . if one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.

See also *In re Dossel*, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884 (Fed. Cir. 1997), wherein the court stated:

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Failure to describe adequately the necessary structure, materials, or acts in the written description means that the drafter has failed to comply with the mandate of § 112 ¶ 2 . . . the mandate that all claims must particularly point out and distinctly claim the subject matter which the applicant regards as his invention.

Such is the case here, in our view. Accordingly, the claims do not comply with the second paragraph of 35 U.S.C. § 112.

In summary and for the reasons above, (1) the decision of the examiner refusing to allow claims 1, 3-7, 9 and 10 as amended by amendments filed subsequent to the final rejection is reversed, and (2) new rejections of claims 1, 3-7, 9 and 10 under 35 U.S.C. § 112, first and second paragraphs, are entered pursuant to 37 CFR § 1.196(b).

This decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

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37 CFR § 1.196(b) also provides that the appellant,  
WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise  
one of the following two options with respect to the new  
grounds of rejection to avoid termination of proceedings  
(§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the  
claims so rejected or a showing of facts relating to  
the claims so rejected, or both, and have the matter  
reconsidered by the examiner, in which event the  
application will be remanded to the examiner. . . .

(2) Request that the application be reheard  
under § 1.197(b) by the Board of Patent Appeals and  
Interferences upon the same record. . . .

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

*REVERSED, 37 CFR § 1.196(b)*

IAN A. CALVERT	)	
Administrative Patent Judge	)	
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	)	
HARRISON E. McCANDLISH	)	BOARD OF PATENT
Senior Administrative Patent Judge	)	APPEALS AND

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	) INTERFERENCES
	)
	)
LAWRENCE J. STAAB	)
Administrative Patent Judge	)



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